

AMENDMENTS TO THE SPECIFICATION

Please replace the last paragraph on page 11 with the following amended paragraph:

Referring to FIG. 3, the mobile station transmits ~~an index R_m~~ channel state value corresponding to an intended transmission rate to the base station on a uplink DRQSCH (Data Rate request Subchannel). The channel state value may be represented by index R_m . R_m is input to a first memory 101 in the base station. Here, the subscript m of R_m indicates the sequence number of a slot being 1.25 ms in duration. The base station has N memories 191, 111, 121, . . . , 131 and 141 for storing indexes corresponding to transmission rates received from the mobile station on the uplink DRQSCH. Each memory is a shift register that is activated in response to a clock signal of a period being the slot duration, 1.25ms. R_m of the first memory 101 and the negative of the second memory 111, are $-R_{m-1}$, are output and applied to the input of a first adder 103. The first adder 103 outputs the difference between R_m and R_{m-1} . R_{m-1} (that is, the sum of R_m and $-R_{m-1}$. $-R_{m-1}$). The output of the first adder 103 is fed to a first calculator 105. R_{m-1} of the second memory 111 and the ~~are~~ negative of the third memory, $-R_{m-2}$ are output and applied to the input of a second adder 113. The second adder 113 outputs the difference between R_{m-1} and R_{m-2} . The output of the second adder 113 is fed to a second calculator 115. In the same manner, the difference between indexes received every 1.25ms slot period is calculated and fed to a corresponding calculator. Finally, R_{m-N+2} of the fourth memory 131 and the negative of the fifth memory ~~are~~ 141, $-R_{m-N+1}$, are output and applied to the input of a third adder 133. The third adder 133 outputs the difference between R_{m-N+2} and R_{m-N+1} . The output of the third adder 133 is fed to a third calculator 135. The first to third calculators 105 to 135 perform a calculation on their input signals by

$$f(n) = |n| \quad \dots (1)$$

or

$$f(n) = |n|^2 \quad \dots (2)$$